

TECHNICAL DATA SHEET

300N-400 Series

Tube Filling Compound



Thixotropic water blocking compound specifically formulated for filling optical fiber buffer loose tubes at high line speeds.

Unigel 300N-400 has a working temperature range from -40 to +80 °C and exhibits excellent resistance to oxidation for long term stability.

Properties	Typical Value	Test Method
Appearance	Translucent	Visual
Density, 25°C (g/ml)	0.86	ASTM D1475
Flash Point (°C)	≥220	ASTM D92
Drop Point (°C)	≥170	ASTM D566
Cone Penetration, 25°C (dmm)	410	ASTM D217 (M)
Cone Penetration, -30°C (dmm)	≥230	ASTM D217 (M)
Viscosity, 50 s ⁻¹ , 25°C (Pa.s)	6.5	UNIGEL - CR Ramp 0-200 s ⁻¹
Viscosity, 200 s ⁻¹ , 25°C (Pa.s)	4.6	UNIGEL - CR Ramp 0-200 s ⁻¹
Oil Separation, 100°C, 24 hours (Wt %)	Zero	FTM 791-321 (M)
Volatile Loss, 100°C, 24 hours (Wt %)	≤1.0	FTM 791-321 (M)
Oxidation OIT, 190°C (min)	≥30	ASTM D3895
Acid Value (mg KOH/g)	≤0.1	ASTM D974-85
Water Content (ppm)	≤100	ASTM D4019-88
Hydrogen Generation, 80°C, 24 hours (μl/g)	≤0.02	UNIGEL
Fungal Growth	Nil	ASTM G21

Packaging Type	Net Weight (Kg)	Supply Options
210 Litre Drum	175kg	Single Journey
1000 Litre IBC	825kg / 765Kg	Single Journey / Returnable
1000 Litre Stainless Steel Vessel	825kg	Returnable
1000 Litre Unibag	750kg	Single Journey

Compatibility

UNIGEL 300N-400 is compatible with most cable grade polymers. Tests on typical acrylate coated optical fiber shows no reaction but it is recommended that compatibility tests are made with all materials likely to come into contact with 300N-400

Processing

UNIGEL 300N-500 has been designed for pumping from ambient conditions and is suitable for high speed loose tubing lines

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